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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SINGH, DALIP K

ART UNIT PAPER NUMBER

2676

13

DATE MAILED: 09/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/904,541

Applicant(s)

NASH ET AL.

Examiner

Dalip K Singh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Response to Amendment

1. This Office Action is in response to applicant's Request for Continued Examination (RCE) dated June 4, 2004 in response to PTO Office Action dated January 14, 2004. The amendments to claim(s) 1-7 and 11-23; addition of new claims 24-26 have been noted and entered in the record, and applicant's remarks have been carefully considered resulting in the action as set forth herein below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-26 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,914,724 to Deering et al.

a. Regarding claims 1, 11 and 18 Deering et al. **discloses** evaluating a mode command to initiate or change a mode, selecting a combination of functions and delivering said combination to a microcode processor (floating point processors 152, Fig. 3)(...the command block 142 interfaces...controls the transfer of data...col. 4, lines 59-67...the floating point processors 152A-152F receive high level drawing commands...col. 5, lines 1-12...these commands and data...are passed in turn to floating point processors 152...col. 6, lines 1-14...the L-core block 354 performs most...calculations using...microcode...col. 6, lines 37-47).

b. Regarding claim 2, Deering et al. **discloses** querying a storage medium (memories 152A-152F...32kx36-bit SRAM...are used for microcode and data storage...col. 5, lines 10-12) to select said combination (...the F-Core block 352 is fully programmable,

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using a 36-bit microword instruction word stored in a 32k word SRAM...the L-Core block 354 performs most lighting calculations using on-chip RAM-based microcode...col. 6, lines 34-38).

c. Regarding claim 3, Deering et al. **discloses** a microcode instruction memory (memories 152A-152F).

d. Regarding claims 4, 5, 12, 13, 17, 19, 20 and 23 Deering et al. **discloses** loading a sequence list into a microcode data memory, wherein said sequence list includes a memory address to said combination (...F-Core block 352...includes a dispatch code that indicates which microcode procedure to run...col. 7, lines 53-63).

e. Regarding claims 6, 14 and 21, Deering et al. **discloses** sending a result from said executing step to a processor for pixel processing or additional microcode processing (...each of the floating point blocks 152A-F connects to each of two draw processor 172A and 172B...perform screen space rendering...and operate to sequence ...the completed pixels...col. 5, lines 13-26).

f. Regarding claim 7, Deering et al. **discloses** microcode processing being done prior to said executing step (See col. 8, lines 15-28).

g. Regarding claims 8-10, 15, 16 and 22, Deering et al. **discloses** three dimensional graphics, animation scene and video game rendering (...a three-dimensional (3-D) graphics accelerator...comprises...a video monitor or display device...various types of display monitor or devices...col. 3, lines 45-61).

h. Regarding claim 24, it is similar in scope to claim 8 above and is rejected under the same rationale.

i. Regarding claim 25, it is similar in scope to claim 1 above and is rejected under the same rationale.

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- j. Regarding claim 26, Deering et al. **discloses** preprocessing data for said combination to calculate values used repetitively during said executing step (...the command block 142 also pre-processes triangle and vector data and performs geometry data...col. 4, lines 59-65).

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Dalip K. Singh** whose telephone number is **(703) 305-3895**. The examiner can normally be reached on Mon-Thu (8:00AM-6:30PM) Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Matthew Bella**, can be reached at **(703) 308-6829**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

dks

September 10, 2004



MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600